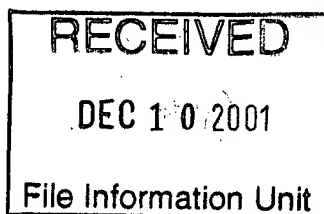


Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REQUEST FOR ACCESS TO AN APPLICATION UNDER 37 CFR 1.14(e)



In re Application of <i>Sprinkler</i>	
Application Number <i>07/324,481</i>	Filed <i>3/16/89</i>
Art Unit	Examiner

Assistant Commissioner for Patents
Washington, DC 20231Paper No. 10

1. ☐ I hereby request access under 37 CFR 1.14(e)(2) to the application file record of the above-identified ABANDONED Application, which is not within the file jacket of a pending Continued Prosecution Application (CPA) (37 CFR 1.53(d)) and is: (CHECK ONE)

☐ (A) referred to in:United States Patent Application Publication No. 5284931, page _____, line _____,

United States Patent Number _____, column _____, line _____, or

an International Application which was filed on or after November 29, 2000 and which

designates the United States, WIPO Pub. No. _____, page _____, line _____.

- ☐ (B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11(b) or 1.14(e)(2)(i), i.e., Application No. _____, paper No. _____, page _____, line _____.

2. ☐ I hereby request access under 37 CFR 1.14(e)(1) to an application in which the applicant has filed an authorization to lay open the complete application to the public.

Laura Perry

Signature

12/10/01

Date

Typed or printed name

FOR PTO USE ONLY

Approved by: _____

Unit: _____ (initials)

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



US005284931A

United States Patent [19]

Springer et al.

[11] Patent Number: 5,284,931
[45] Date of Patent: Feb. 8, 1994

- [54] **INTERCELLULAR ADHESION MOLECULES, AND THEIR BINDING LIGANDS**
- [75] Inventors: Timothy A. Springer, Newton, Mass.; Robert Rothlein; Steven D. Marlin, both of Danbury, Conn.; Michael L. Dustin, University City, Mo.
- [73] Assignee: Dana Farber Cancer Institute, Boston, Mass.
- [21] Appl. No.: 515,478
- [22] Filed: Apr. 27, 1990

Related U.S. Application Data

- [63] Continuation-in-part of Ser. No. 456,647, Dec. 22, 1989, which is a continuation-in-part of Ser. No. 45,963, May 4, 1987, which is a continuation-in-part of Ser. No. 115,798, Nov. 2, 1987, which is a continuation-in-part of Ser. No. 155,943, Feb. 16, 1988, which is a continuation-in-part of Ser. No. 189,815, May 3, 1988, which is a continuation-in-part of Ser. No. 250,446, Sep. 28, 1988, which is a continuation-in-part of Ser. No. 324,481, Mar. 16, 1989, which is a continuation-in-part of Ser. No. 373,882, Jun. 30, 1989, which is a continuation-in-part of Ser. No. 456,647, Dec. 22, 1989.

- [51] Int. Cl.⁵ A61K 39/395
- [52] U.S. Cl. 424/85.8; 530/388.22; 530/395; 530/808; 530/868; 514/8
- [58] Field of Search 424/85.8, 85.91; 530/387, 389, 808, 388.22

References Cited

PUBLICATIONS

- Cunningham C, et al., TIBTECH 10, Apr., 1992. "Anti-body engineering—how to be human."
- Dantel, J., et al., Curr. Opin. Immunol. 3:740-747 (1991), "Use of Monoclonal antibodies in human transplantation."
- Flavin, T., et al., Transpl. Proc. 23(1):533-534 (Feb. 1991) "Monoclonal antibodies against intercellular adhesion molecule 1 prolong carioige allograft survival in CY momolgus monkeys."
- Gibbs, W. W., Scientific American (Jul. 1993), "Try, try again," pp. 101-103.

- Hams, W. J., et al. Tibtech 11 (Feb. 1993), pp. 42-44. "Therapeutic antibodies—the coming of age."
- Haug, C. E., et al., Transplantation 55:766-773, (Apr. 1993), "A Phase I trial of immunosuppression with anti-, cam-12 (CD54) m Ab in renal allograft recipients."
- Ortho Multicenter Transplant Study Group, New Engl. J. Med. 313:337-341 (Aug. 8, 1985).
- Physician's Desk Reference (1993), pp. 1702-1703. "Orthoclone OKT3".
- Marlin, S. D. et al. 1987. Cell 51: 813-819. "Purified Intercellular Adhesion Molecule-1 . . ."
- Rothlein, R. et al. 1986. J. Immunol. 137:1270-1274. "A Human Intercellular Adhesion Molecule (ICAM-1) . . ."
- Dustin, M. L. et al. 1986. J. Immunol. 137(1):245 "Induction by IL1 and Interferon-8 . . ."
- Cosimi et al., J. Immunol. 144(12):4604-4612 (1990).
- Flavin et al., Transplant. Proc. 23(1):553-534 (1991).
- Tolkoff-Rubin et al., J. Amer. Soc. Nephrology 2(3):820 No. 2P (1991).
- Kavanaugh et al., 56th Meeting of Amer. College of Rheumatology, Oct. 13-15, Atlanta, Ga. (1992).
- Boyd et al., Proc. Natl. Acad. Sci. USA 85:3095-3099 (1988).

(List continued on next page.)

Primary Examiner—Christine M. Nucker
Assistant Examiner—Thomas Cunningham
Attorney, Agent, or Firm—Sterne, Kessler, Goldstein & Fox

[57] ABSTRACT

Pharmaceutical compositions comprising antibodies to intercellular adhesion molecule-1 (ICAM-1 or CD54) are useful in methods of decreasing the severity of inflammation associated with the adhesion of leukocytes to cells bearing ICAM-1. Treatment with anti-ICAM-1 antibodies reduced the severity of inflammation associated with acute organ or tissue rejection and prolonged allograft survival time. Such compositions may optionally contain other immunosuppressive agents.

11 Claims, 25 Drawing Sheets